AUTHOR INDEX

Abel, E.L. 195
Ansari, Khurshed A. 117
Anugwa, Friday O.I. 167
Archer, Jonathan R. 3, 5, 6
Armstrong, Marcia J. 175
Austad, Stephen N. 4, 5, 6

Baik, M.G. 159
Barkhouse, Lana Beth 185
Berg, I.E. 159
Buonomo, Frances C. 151
Bury, R. Bruce 47

Cohen-Salmon, Charles 43
Cole, David E.C. 185
Cole, T.M., III 140
Cury, Lor 141
Crew, Mark 139

Daris, W.J. 17
deMello, Maria Alice 141
Donoghue, Dan J. 151
Dunnington, E.A. 87, 151

Engeman, Richard M. 47
Erickson, G.M. 159

Fahey, John 185, 191
Freeman, Thomas B. 87

German, Rebecca Z. 101, 107
Gillespie, C. Terrence 185
Gyllenberg, M. 25

Hargis, P.S. 93
Harrison, David E. 1, 3, 5, 6, 85
Hazzard, DeWitt G. 59

Jansons, R.A. 35
Jungers, W.L. 140

Kaplan, Eli 117
Keller, W.L. 159

Lee, A.M. 93
Leichter, Joseph 129
Lhotellier, Lin 43

McNabb, F.M. Anne 87
Mersmann, H.J. 17
Meyer, Terry E. 175
Meyers, Laura L. 101, 107
Moilanen, Irma 145
Mosier, H. David 35

Owsley, D.W. 140
Oyedeji, Caroline O. 123

Pardue, S.L. 93
Park, C.S. 159
Phelan, John P. 4, 5, 6
Pond, Wilson G. 17, 167

Rantakallio, Paula 145
Rickard, Russel S. 47

Sandel, G.W. 93
Scanes, Colin G. 151
Shoeman, Don 117
Siegel, P.B. 87, 151
Snyder, David L. 57
Soban, Jane 59

Vassilopoulou-Sellin, Rena 123

Walford, Roy L. 139
Warner, Carol M. 175
Webb, G.F. 25
Witten, Matthew 7, 58

Yen, J.T. 17
Yu, Byung Pal 57

Zerbe, Gary O. 47

AUTHOR INDEX

Abel, E.L. 195
Ansari, Khurshed A. 117
Anugwa, Friday O.I. 167
Archer, Jonathan R. 3, 5, 6
Armstrong, Marcia J. 175
Austad, Stephen N. 4, 5, 6

Baik, M.G. 159
Barkhouse, Lana Beth 185
Berg, I.E. 159
Buonomo, Frances C. 151
Bury, R. Bruce 47

Cohen-Salmon, Charles 43
Cole, David E.C. 185
Cole, T.M., III 140
Cury, Lor 141
Crew, Mark 139

Daris, W.J. 17
deMello, Maria Alice 141
Donoghue, Dan J. 151
Dunnington, E.A. 87, 151

Engeman, Richard M. 47
Erickson, G.M. 159

Fahey, John 185, 191
Freeman, Thomas B. 87

German, Rebecca Z. 101, 107
Gillespie, C. Terrence 185
Gyllenberg, M. 25

Hargis, P.S. 93
Harrison, David E. 1, 3, 5, 6, 85
Hazzard, DeWitt G. 59

Jansons, R.A. 35
Jungers, W.L. 140

Kaplan, Eli 117
Keller, W.L. 159

Lee, A.M. 93
Leichter, Joseph 129
Lhotellier, Lin 43

McNabb, F.M. Anne 87
Mersmann, H.J. 17
Meyer, Terry E. 175
Meyers, Laura L. 101, 107
Moilanen, Irma 145
Mosier, H. David 35

Owsley, D.W. 140
Oyedeji, Caroline O. 123

Pardue, S.L. 93
Park, C.S. 159
Phelan, John P. 4, 5, 6
Pond, Wilson G. 17, 167

Rantakallio, Paula 145
Rickard, Russel S. 47

Sandel, G.W. 93
Scanes, Colin G. 151
Shoeman, Don 117
Siegel, P.B. 87, 151
Snyder, David L. 57
Soban, Jane 59

Vassilopoulou-Sellin, Rena 123

Walford, Roy L. 139
Warner, Carol M. 175
Webb, G.F. 25
Witten, Matthew 7, 58

Yen, J.T. 17
Yu, Byung Pal 57

Zerbe, Gary O. 47

SUBJECT INDEX

Acceleration/deceleration of aging 7
Adipose tissue 93
Aging 117, 139, 141
Aging curves 7
Aging models 7
Alcohol 195
Allometry 101, 107
Bibliography; aging rodents 59
Birth weight 195
Body size 35
Body size, set point for 35
Body weight 87
Bovine mammary gland 159
Brain lipids 117
Caloric restriction 3
Catalase 117
Cataract inheritance 43
Catch-up growth 35
Central nervous system 117
Chickens 87, 93, 151
Cigarette smoke 129
Compensatory growth 167, 159
Cortisone treatment 35
Cystic fibrosis 185
Darwinian fitness 4
Database of survival data 58
Deduction 107
Development 87, 145
Dietary restriction 4, 57, 139
Disease 57
Duration of alcohol 195
Dwarf 151
Editorial 139
Embryogenesis 93
Erratum 140
Ethanol 129
Extended longevity 3, 4
Feed restriction 17
Feed restriction (14 d) 167
Fetal development 17
Fetal growth 129
Food restriction 3
Gastrointestinal tract 17, 167
Gender 175
Genetics in mice 43
Germ-free rats 57
Gestational age 101, 107
Glutathione peroxidase 117
Gompertz curves 101, 107
Gompertzian tumor growth 25
Growth 87, 93, 141, 145
Growth curve model 191
Growth curves 47
Growth hormone 93, 159
Growth inhibitor 123
Growth of solid tumors 25
H-2 175
Height velocity 185
Heme 123
Hemolytic disease model 123
Human fetal growth 101, 107
Human development 145
Human growth 145
IGF I, IGF II 151
Lactation 159
Lifespan, genetic effects 175
Linear growth 191
Lipid peroxidation 117
Longevity, genetic effects 175
Longitudinal growth curves 191
Longitudinal growth data 47
Lower limb 107
Major histocompatibility complex 175
Malnutrition 141
Mammary development 159
Math models 7, 25
Mathematical modeling 185
Mice 175
Milk protein mRNA 159
Mouse cataract model 43
Mouse development 195
Natural selection 3, 4
Neonatal head-irradiation 35
NIA aging colony 59
Nonprotein calorie restriction 17
Organ weights 17
Ornithine decarboxylase 17
Parametric analyses 47
Paternal alcohol 195
Paternal effects 195
Perinatal morbidity 145
Preece & Barnes models 191
Pregnancy 141
Pregnant rats 17
Protein deficiency 141
Quiescence in cells 25

Rat growth 123, 129
Rats 167
Realimentation 167
Reproduction 141
Pubertal growth spurt 185
Selection for weight 87
School 145
Senile cataract 43
Superoxide dismutase 117
Thyroid 87
Thyroid hormones 151
Tumor growth 25
Turtle growth curves 47
Twins 145
Vocation 145
Uterus-conceptus 17
Visceral organs 167
Weight, selected high/low 151
Western painted turtle 47

TABLE OF CONTENTS

GROWTH, DEVELOPMENT AND AGING
VOLUME 53, NUMBER 1 & 2, SPRING & SUMMER 1989

Purposes and Policies of GDA 1
DAVID E. HARRISON

Editorial: Natural Selection for Extended Longevity from Food Restriction 3
DAVID E. HARRISON AND JONATHAN R. ARCHER

Editorial: Natural Selection, Dietary Restriction, and Extended Longevity 4
JOHN P. PHELAN AND STEPHEN N. AUSTAD

Quantifying the Concepts of Rate and Acceleration/Deceleration of Aging 7
MATTHEW WITTEN

Reproduction and Organ Weight Responses in Female Rats Fed a Restricted Balanced Diet or a Restricted Nonprotein Calorie Diet with or without Supplemental Glutamine or Cysteine 17
W.G. POND, H.J. MERSMANN, J.T. YEN, AND W.J. DARIS

Quiescence as an Explanation of Gompertzian Tumor Growth 25
M. GYLLENBERG AND G.F. WEBB

Successive Resetting of the Set Point for Target Body Size 35
H.D. MOSIER AND R.A. JANSONS

A Note on the Genetics of a Unilateral Senile Cataract in Mice 43
CHARLES COHEN-SALMON, LIN LHOTELLIER, WIM E. CRUSIO, AND ROGER WARD

A Nonparametric Comparison of Monomolecular Growth Curves: Application to Western Painted Turtle Data 47
RUSSEL S. RICKARD, RICHARD M. ENGEMAN, GARY O. ZERBE, AND R. BRUCE BURY

Book Review
Progress in Clinical and Biological Research 57
DAVID L. SNYDER

Letter to the Editor 58

Studies of Aging Using Genetically Defined Rodents: A Bibliography 59
DEWITT G. HAZZARD AND JANE SOBAN

TABLE OF CONTENTS

GROWTH, DEVELOPMENT AND AGING
VOLUME 53, NUMBER 3, AUTUMN 1989

Purposes and Policies of GDA 85
DAVID E. HARRISON

Thyroid Hormones and Growth Patterns of Embryonic and Posthatch Chickens from Lines Selected for High and Low Juvenile Body Weight 87
F.M. ANNE MCNABB, E.A. DUNNINGTON, THOMAS B. FREEMAN, AND P.B. SIEGEL

In Ovo Growth Hormone Alters Growth and Adipose Tissue Development of Chickens 93
P.S. HARGIS, S.L. PARDUE, A.M. LEE, AND G.W. SANDEL

The Role of Time and Size in Ontogenetic Allometry: I. Review 101
REBECCA Z. GERMAN AND LAURA L. MEYERS

The Role of Time and Size in Ontogenetic Allometry: II. An Empirical Study of Human Growth 107
REBECCA Z. GERMAN AND LAURA L. MEYERS

Age-Related Changes in Lipid Peroxidation and Protective Enzymes in the Central Nervous System 117
KHURSHED A. ANSARI, ELI KAPLAN AND DON SHOEMAN

Heme Overload Inhibits the Growth of Normal Rats 123
RENA VASSILOPOULOU-SELLIN AND CAROLINE O. OYEDEJI

Growth of Fetuses of Rats Exposed to Ethanol and Cigarette Smoke During Gestation 129
JOSEPH LEICHTER

TABLE OF CONTENTS

GROWTH, DEVELOPMENT AND AGING
VOLUME 53, NUMBER 4, WINTER 1989

Purposes and Policies of GDA 138
DAVID E. HARRISON

Editorial: How Dietary Restriction Retards Aging: An Integrative Hypothesis 139
ROY L. WALFORD AND MARK CREW

Erratum to Jungers, Cole and Owsley 140

Influence of Protein-Calorie Malnutrition on Reproductive Performance of Young and Mature Rats 141
MARIA ALICE R. DE MELLO AND LOR CURY

The Growth, Development and Education of Finnish Twins: A Longitudinal Follow-Up Study in a Birth Cohort from Pregnancy to Nineteen Years of Age 145
IRMA MOILANEN AND PAULA RANTAKALLIO

Plasma Concentrations of Insulin Like Growth Factors (IGF-)I and IGF-II in Dwarf and Normal Chickens of High and Low Weight Selected Lines 151
COLIN G. SCANES, E.A. DUNNINGTON, FRANCES C. BUONOMO, DAN J. DONOGHUE AND P.B. SIEGEL

Role of Compensatory Growth in Lactation: A Stair-Step Nutrient Regimen Modulates Differentiation and Lactation of Bovine Mammary Gland 159
C.S. PARK, M.G. BAIK, W.L. KELLER, I.E. BERG AND G.M. ERICKSON

Growth of Whole Body and Organs of Growing Rats during Feed Restriction and Subsequent Realimentation 167
FRIDAY O.I. ANUGWA AND WILSON G. POND

Effects of H-2 Haplotype and Gender on the Lifespan of A and C57BL/6 Mice and Their F_1, F_2, and Backcross Offspring 175
TERRY E. MEYER, MARCIA J. ARMSTRONG AND CAROL M. WARNER

Quantitating the Effect of Cystic Fibrosis on Linear Growth by Mathematical Modelling of Longitudinal Growth Curves 185
LANA BETH BARKHOUSE, JOHN FAHEY, C. TERRENCE GILLESPIE AND DAVID E.C. COLE

Quantitating the Effect of Cystic Fibrosis on Linear Growth by Mathematical Modelling of Longitudinal Growth Curves: Appendix 191
JOHN FAHEY

Duration of Paternal Alcohol Consumption Does Not Influence Offspring Growth and Development 195
E.L. ABEL

Author Index 201

Subject Index 203